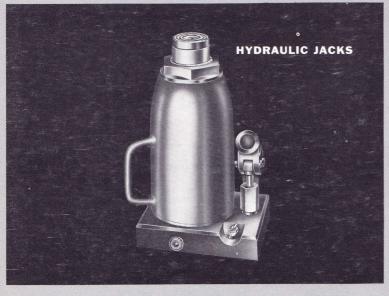
# DUFF-NORTON

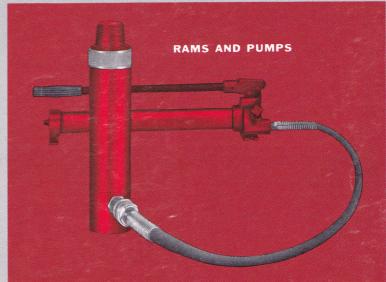
THE WORLD'S MOST COMPLETE LINE OF

## LIFTING JACKS









### DUFF-NORTON

#### **RAM-PAC HYDRAULIC RAMS**







RC-20-H-11.2 RC-10-H-4.5

RC-30-H-4.5-2

9 Rams-10 to 100 tons capacity

The Duff-Norton Ram-Pac line of nine rams has been designed to give you more travel for the same closed height than other rams now available. They also have fewer parts which reduces maintenance. All rams are made of high-strength material.

| Model No.  | Ca-<br>pacity<br>(Tons)                 | Closed<br>Ht. (In.)  | Ex-<br>tended<br>Ht. (In.)  | Base<br>Size<br>(In. Dia.)          | Plunger<br>Dia. (In.)         | Oil<br>Capacity<br>(Cu. In.)                                     | Weight<br>(Lbs.)                           | Working<br>Pressure<br>(PSI)                                 |
|--|---|--|---|-------------------------------------|-------------------------------|--|--|--|
| RC10H4.5   | 10                                      | 4½<br>513/16<br>w/head                                     | 73/8<br>813/16<br>w/head  | 23/8                                | 1½                            | 7.22   | 51/4                                       | 9650   |
| RC10H11.7<br>RC20H11.2<br>RC30H4.5-2<br>RC30H10<br>RC50H4.7<br>RC50H11B<br>RC100H11B<br>RC-100H5.7 | 10<br>20<br>30<br>30<br>50<br>50<br>100 | 1111/16<br>111/4<br>41/2<br>10<br>43/4<br>11<br>11<br>53/4 | 17 1/8<br>16 3/8<br>6 15/16<br>16<br>6 1/8<br>17 1/8<br>16<br>7 3/4 | 23/8<br>33/8<br>37/8<br>4<br>5<br>7 | 1½ 2³/16 2½ 25/8 3½ 3½ 411/16 | 16.25<br>39.25<br>16.25<br>53.25<br>24.4<br>92.77<br>144.4<br>43 | 11%<br>21%<br>13½<br>27<br>25<br>49%<br>95 | 9650<br>9050<br>9250<br>9250<br>9055<br>9055<br>9695<br>9695 |

#### **RAM-PAC PUMPS**





8 Models-3 hand-5 power

**HP-40** and **HP-50** (single-speed) and **HP-150** (two-speed) hand pumps require less effort and fewer strokes because of a high mechanical advantage and longer plunger stroke per inch of rise. **HAP-250** power pump is actuated by air pressure of 85 to 110 psi, requiring only 15 cu. ft. of air per minute at rated capacity. **HEL-250\*** and **HEP-250** power pumps are operated by 1 HP, 115-230 volt electric motor.

HGL-250\* and HGP-250 power pumps are operated by 1.7 HP gasoline engine and thus are ideal for field work.

\*Constructed with aluminum block and housing, for easy portability.

| Pump<br>Model<br>No. | Oil<br>Cap.<br>(Cu. In.) | Max.<br>Working<br>Pressure<br>(psi) | Handle<br>Length<br>Inches | Length<br>Inches | Width<br>Inches                       | Height<br>Inches | Weight<br>Pounds |
|----------------------|--------------------------|--------------------------------------|----------------------------|------------------|---------------------------------------|------------------|------------------|
| HP-40<br>HP-50       | 40<br>50                 | 10,000                               | 14<br>20                   | 18<br>24         | 53/8<br>53/8                          | 53/8<br>53/8     | 10½<br>12½       |
| HP-150               | 150                      | 10,000                               | 20                         | 25               | 7                                     | 7                | 28               |
| HAP-250<br>HEL-250   | 346.5<br>346.5           | 10,000                               | _                          | 12               | 10 <sup>2</sup> / <sub>3</sub> " Dia. | 15¼<br>19½       | 90<br>64         |
| HEP-250              | 346.5                    | 10,000                               | _                          | _                | 10½" Dia.                             | 18%              | 100              |
| HGL-250<br>HGP-250   | 346.5<br>346.5           | 6,000<br>10,000                      | _                          | 12               | 10<br>10½″ Dia.                       | 19<br>19         | 64<br>91         |

#### **COMPLETE RAM-PAC UNITS**

Each Ram-Pac Unit includes a ram, ram half quick connect coupling, six feet of high pressure hose, hose half quick connect coupling and pump.

PR-10-H-4.5—Low height, ten-ton unit

PR-10-H-11.7—Ten-ton unit PR-20-H-11.2—Twenty-ton unit PR-30-H-4.5-2—Low height, thirty-ton unit

PR-30-H-10—Thirty-ton unit PR-50-H-4.7—Low height, fifty-ton unit

PR-50-H-11B-Fifty-ton unit

#### **HY-POWER HYDRAULIC JACKS**



All 3 to 12 ton models (left) have extension screws which can be run up by hand to load height. 30-H-11, 50-H-12 and 100-H-12 models have Dual Pumps—which bring head quickly to load height.



2-H-9

50-H-12

| Jack<br>No.                     | Ca-<br>pacity<br>Tons | Closed<br>Height<br>Inches   | Power<br>Raise<br>Inches | Exten-<br>sion<br>Screw | Total<br>Height<br>Inches | Head<br>Diam.<br>Inches | Base<br>Size<br>Inches                  | Handle<br>Length<br>Inches | Weight<br>Pounds      |
|---------------------------------|-----------------------|--|--------------------------|-------------------------|---------------------------|-------------------------|---|----------------------------|-----------------------|
| 3-H-9<br>6-H-9                  | 3 5                   | 8½<br>9  | 6<br>6¼                  | 31/2 *                  | 18<br>19¼                 | 1 1/8<br>1 3/8          | 3¾ x65/8<br>4½ x71/8                    | 33½<br>33½                 | 13<br>19<br>22        |
| 8-H-9<br>12-H-9<br>20-H-11S     | 8<br>12<br>20         | 9<br>9¼<br>10¾   | 61/4<br>51/2<br>73/4     | 4¼ *<br>3¼ *<br>None    | 19½<br>18<br>18½          | 1½<br>1¾<br>2¼          | 45/8 x 7 1/8<br>45/8 x 83/8<br>51/2 x 7 | 33½<br>23½<br>23½<br>23½   | 28<br>40              |
| 25-H-7.5<br>25-H-9.3<br>30-H-11 | 25<br>25<br>30        | 7½<br>9¾<br>11   | 4<br>6<br>7              | None<br>None<br>None    | 11½<br>15¾<br>18          | 2½<br>2½<br>3           | 5x7<br>5x7<br>6x8½                      | 27½<br>27½<br>20           | 35<br>38<br>66        |
| 35-H-7.7<br>35-H-9.7<br>50-H-12 | 35<br>35<br>50        | 7 <sup>3</sup> / <sub>4</sub><br>9 <sup>3</sup> / <sub>4</sub><br>12 | 6 7                      | None<br>None<br>None    | 11¾<br>15¾<br>19          | 25/8<br>25/8<br>33/4    | 6x8<br>6x8<br>7½x10                     | 23½<br>23½<br>20           | 66<br>51<br>55<br>123 |
| 100-H-12<br>25-H-8.7<br>TIMBER  | 100<br>25             | 12<br>8¾   | 6½<br>4                  | None<br>None            | 181/8<br>123/4            | 5                       | 9½ x12<br>5x7                           | 20<br>27½                  | 225<br>36             |

#### RATCHET LOWERING JACKS



Capacities from 5 to 20 tons. All 5-ton models (left) furnished with double round sockets and steel operating lever 1" x 30" long; 10-ton (right) and 15-ton models have lever 1½" x 62" long; 20-ton jack has single round socket and steel operating lever 1½" x 62" long.



1022

| Jack<br>No.      | Capacity<br>Tons | Height<br>Inches | Raise<br>Inches | Base<br>Inches   | Head<br>Inches   | Foot Lift<br>Height<br>Inches | Weight<br>Pounds     |
|------------------|------------------|------------------|-----------------|------------------|------------------|-------------------------------|----------------------|
| 514-MT<br>516-MT | 5<br>5<br>5      | 14<br>16         | 7½<br>9½        | 5¼ x7¾<br>5¼ x7¾ | 2½ x2¾<br>2½ x2¾ | 1½ 1½                         | 31<br>34             |
| 521-MT<br>1017   | 5<br>10          | 21<br>171/4      | 141/2           | 5¼ x7¾<br>7x10¼  | 2½ x2¾<br>3x3    | 1½<br>2¼                      | 41<br>55<br>59<br>65 |
| 1020<br>1022     | 10<br>10         | 20               | 10½<br>12½      | 7x10¼<br>7x10¼   | 3x3<br>3x3       | 21/4                          | 59                   |
| 1522             | 15               | 22               | 111/2           | 8x11             | 3x31/2           | 21/2                          | 82                   |
| 1528<br>2028     | 15<br>20         | 28<br>28         | 17½<br>18       | 8x11<br>8x11     | 3x3½<br>3x3½     | 2½<br>2½                      | 96<br>103            |

## GEARED RATCHET LOWERING JACK

29-A—Capacity, 25 tons; height, 2734"; raise, 1514"; base diameter, 12"; head, 312" x 334"; weight, 170 lbs. Single acting. All gears and moving parts are machine cut and heat treated. Furnished with round wooden operating lever 316" x 66" long.



29-A



## 4-WAY RATCHET LOWERING JACK

1523—Capacity, 15 tons; height 23"; raise,  $12\frac{1}{2}$ "; base  $7\frac{1}{2}$ " x  $10\frac{3}{4}$ ", head  $2\frac{3}{4}$ " x 4"; weight, 70 lbs. Furnished with steel operating lever  $1\frac{1}{4}$ " x 60" long.

#### CABLE REEL JACKS

520-CR —Screw jack for reels 42" to 60" dia.
530-CR —Screw jack for reels 60" to 90" dia.
524-MCR—Ratchet jack for reels 20" to 60" dia.—Furnished with double round sockets and steel operating lever 1" x 30".

1030-CR —Ratchet jack for reels 20" to 84" dia. Furnished in left and right hand pairs, single round sockets with operating levers 1½" x 60". Solid oak "T" frame base.

1022-CR —Ratchet jack for reels 25" to 90" dia. Furnished with single round cooker and color and the single round c

single round socket and steel operating lever 11/4"



| Jack  | Capacity                | Height                        | Raise                        | Base   | Weight                       |
|---|-------------------------|-------------------------------|------------------------------|--|------------------------------|
| No.   | Tons                    | Inches                        | Inches                       | Inches                                       | Pounds                       |
| 520-CR<br>530-CR<br>524-MCR<br>1030-CR<br>1022-CR | 5<br>5<br>5<br>10<br>10 | 20<br>30<br>231/4<br>30<br>38 | 11½<br>16½<br>14<br>14<br>12 | 12½ x 26%<br>15¼ x 39½<br>8¾ x 18<br>9¾ x 24 | 66<br>90<br>68<br>112<br>103 |







524-MCR

117

TRACK JACKS

All Genuine Barrett Track Jacks are furnished with single square socket without lining bar. Round socket and wooden operating lever may be furnished (21/16" x 48" long) at extra cost.



517-BA

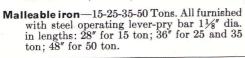
| Jack<br>No.  | Capacity<br>Tons                                   | Height<br>Inches                                       | Raise<br>Inches                                   | Base<br>Inches   | Head<br>Inches                                     | Foot Lift<br>Height<br>Inches   | Weight<br>Pounds                                   |
|--|--|--|---|--|--|---|--|
| *117A<br>117<br>217<br>†517B<br>†*517BA<br>617<br>1-A<br>110<br>†*717-BA | 15<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15 | 22<br>22<br>16½<br>11½<br>11½<br>28<br>22<br>22¼<br>14 | 12<br>13<br>7½<br>5<br>5<br>18½<br>13<br>13<br>7½ | 6½ x11<br>6½ x11<br>6½ x11<br>6½ x10¼<br>6½ x10¼<br>7x12<br>6½ x11<br>6½ x11<br>6½ x11 | 3x3<br>3x3<br>3x3<br>—<br>3x3<br>3x3<br>3x3<br>3x3 | 2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2 | 46<br>66<br>52<br>45<br>31<br>81<br>60<br>62<br>36 |

\*Aluminum

†Broad Toe

#### **JOURNAL JACKS**

Aluminum—25-35-50-100 Tons. Are 25% lighter than regular models. All furnished with steel operating lever-pry bar 1½" dia. in lengths: 36" for 25 and 35 ton; 48" for 50 ton; 60" for 100 ton. (A-Series)





| Jack<br>No.  | Capacity<br>Tons   | Height<br>Inches   | Raise<br>Inches   | Base Dia.<br>Inches  | Head Dia.<br>Inches                                  | Weight<br>Pounds   |
|--|--|--|---|--|--|--|
| 1507<br>111-C-2<br>2509-C-2<br>2510-A-2*<br>3510-C-2<br>3510-A-2*<br>5010-A-2*<br>5010-A-2*<br>100-A-12*<br>100-C-12 | 15<br>15<br>25<br>25<br>25<br>35<br>35<br>35<br>50<br>50<br>100<br>100 | 7<br>10<br>9<br>10<br>10<br>10<br>10<br>10<br>10<br>12<br>12 | 2½<br>5<br>4½<br>5<br>5<br>5<br>5<br>4<br>4½<br>4<br>4<br>4 | 43/4<br>43/4<br>53/8<br>53/8<br>53/8<br>55/8<br>73/16<br>73/16<br>83/4 | 25%<br>25%<br>3<br>3<br>3<br>35%<br>4<br>4<br>4<br>5 | 22<br>26<br>37<br>38<br>29<br>48<br>35<br>48<br>64<br>98 |

<sup>\*</sup>Aluminum

#### **SCREW JACKS**



5017\*

5017—Low height, 50-ton removable foot lift furnished with pinched end steel operating lever  $1\frac{1}{8}''$  x 48''.NOTE: Foot lift is rated at one-half capacity of jack.

| Jack<br>No. | Capacity<br>Tons | Height<br>Inches | Raise<br>Inches | Base<br>Diam.<br>Inches | Head<br>Diam.<br>Inches | Foot Lift<br>Height<br>Inches | Weight<br>Pounds |
|-------------|------------------|------------------|-----------------|-------------------------|-------------------------|-------------------------------|------------------|
| 5017        | 50               | 161/2            | 7               | 12                      | 5½                      | 5                             | 191              |

\*Detachable foot lift is 5" high

#### **HEAVY DUTY SCREW JACKS**



Large Head—50-Tons. Furnished with steel combination operating lever-pry bar  $1\frac{1}{8}$ " x 42".

Small Head-25 ton models furnished with steel combination operating lever-pry bar 1" x 38". 35-ton models lever  $1\frac{1}{8}$ " x 42".

| Jack<br>No. | Capacity<br>Tons | Height<br>Inches | Raise<br>Inches | Base<br>Inches | Head<br>Diam.<br>Inches | Foot Lift<br>Height<br>Inches | Weight<br>Pounds |
|-------------|------------------|------------------|-----------------|----------------|-------------------------|-------------------------------|------------------|
| "S"         | 15               | 21 ½             | 11½             | 8½             | 4½                      | 2 1/8                         | 73               |
| B-2522      | 25               | 22               | 10¼             | 8x9¾           | 55%                     | 3 1/2                         | 137              |
| B-3526      | 35               | 26               | 14¼             | 9x10½          | 6½                      | 3 1/2                         | 207              |
| B-5024      | 50               | 24               | 14½             | 14             | 10¼                     | 5 1/4                         | 289              |

## DUFF-NORTON LIFTING JACKS

#### SPEED CONTROLLED JACKS



Large Head — Foot lift — 35-50-100 Tons. High-speed, self-lowering. Furnished with steel operating lever-pry bar 11/8" x 50" for 35 ton; others with 13/6" x 60" levers.

Small Head —50-100 Tons. High-speed, self-lowering. Furnished with steel operating lever-pry bar 13/6" x 60".



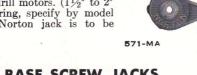
1263-C

| Capacity<br>Tons | Height<br>Inches | Raise<br>Inches                   | Base<br>Diam.<br>Inches | Head<br>Diam.<br>Inches                | Foot Lift<br>Height<br>Inches                      | Weight<br>Pounds   |
|------------------|------------------|-----------------------------------|-------------------------|--|--|--|
| 35               | 26               | 14                                | 12                      | 63/4                                   | 3¾   | 178<br>269   |
| 50<br>50<br>100  | 26<br>26<br>26   | 14½<br>14½<br>12                  | 13%<br>14<br>13%        | 10<br>10                               | 4½<br>4½   | 292<br>412   |
|                  | 35<br>50<br>50   | 35 26<br>50 26<br>50 26<br>100 26 | Tons   Inches   Inches  | Tons   Height   Raise   Diam.   Inches | Capacity   Height   Raise   Diam.   Diam.   Inches | Capacity   Height   Inches   Inches   Diam.   Diam.   Inches   Diam.   Diam.   Inches   Inches   Diam.   Inches   Inches   Diam.   Inches   Inches   Diam.   Inches   Inches   Diam.   Inches   Inches   Diam.   Inches   Inches   Diam.   Inches   Inches   Diam.   Inches   Inches   Diam.   Inches |

#### **MOTOR ATTACHMENT**

**571-MA**—Converts all speed controlled self-lowering jacks to motor operation by use of rotary air or electric drill motors. (1½" to 2" drill size) When ordering, specify by model number which Duff-Norton jack is to be converted.







1½X8 1¾X 1½X10 2X8 1½X12 2X10 2X12

#### **BELL BASE SCREW JACKS**

Easy-operating, safe, sturdy jack screws with an extra heavy base, solid all the way around to prevent mud and sand from entering the jack mechanism. One-piece selected steel screw has drop-forged steel head fitted with serrated steel top. Capacities 12 to 20 tons; closed heights  $10\frac{3}{4}$ " to  $15\frac{3}{4}$ "; raises 6" to 9".

#### TRAVERSING JACK



**S-825**—Capacity, 35 tons; height, 24": raise  $10\frac{1}{2}$ "; horizontal travel,  $12\frac{3}{8}$ "; base,  $9\frac{1}{4}$ " x  $22\frac{5}{8}$ "; head diameter,  $4\frac{1}{2}$ "; weight, 139 lbs.

A strong horizontal load-moving jack for rerailing railway locomotives and cars, and for rigging and industrial service where combined horizontal moving and lifting are required. Steel operating lever 15% x 54″ long, is also a carrying handle.

S-825

#### AIR MOTOR JACKS



Screw jacks operated by rotary air motor—save time and labor—lower operating costs. Will not exceed safe limit of raise, lower automatically. One man can operate two jacks simultaneously by means of "Y" connection. The "Y" consists of two 20-ft. sections of 34″ hose with necessary ends, couplings, clamps and "Y" valves. Available at extra cost.

126-RX

| Jack   | Capacity | Height | Raise  | Base Dia. | Head Dia. | Weight |
|--------|----------|--------|--------|-----------|-----------|--------|
| No.    | Tons     | Inches | Inches | Inches    | Inches    | Pounds |
| 228-R  | 20       | 18     | 18     | 12        | 4         | 238    |
| 326-R  | 35       | 26     | 143/4  | 14        | 4         | 258    |
| 528-RX | 50       | 28     | 17     | 14        | 5         | 370    |
| 636-RX | 50       | 36     | 25     | 15        | 5         | 425    |
| 126-RX | 75-100   | 26     | 13¾    | 13        | 6½        | 448    |
| 144-RX | 75-100   | 44     | 30     | 18        | 6½        | 530    |

#### **PUSH AND PULL JACKS**



Designed for pushing apart or pulling together structural members, walls, machinery and equipment. Available in 10 and 15 ton capacities; 24", 28" and 38" in length.

| Jack<br>No.          | Capacity<br>Tons     | Diameter<br>of Screw<br>Inches          | Length<br>Overall<br>Inches | Weight<br>Pounds |
|----------------------|----------------------|---|-----------------------------|------------------|
| 1024<br>1029<br>1538 | 10<br>10<br>10<br>15 | 2<br>2<br>2 <sup>1</sup> / <sub>2</sub> | 24<br>28<br>38              | 46<br>50<br>97   |

<sup>\*</sup>Jacks listed above are standard. However, this type jack can be furnished in greater lengths. Prices on request.

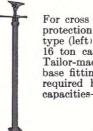
#### TRENCH BRACES



1001-1015

For bracing the sheeting which forms the sides of trenches of various sizes. Two-way lever nut regularly furnished. Three-way nut, for working in close quarters where a two-way nut cannot be used, may be furnished alternately at no extra cost. Available in lengths (closed) from 16" to 60".

## MINE ROOF and TIMBERING JACKS —FITTINGS



For cross timbering, mine roof support, and protection of working face area. Standard type (left) available as complete unit in 8 and 16 ton capacities; heights from 30" to 72". Tailor-made type (right) includes top and base fittings which attach to 2" pipe, cut to required height on the job; 8 and 16 ton capacities—pipe not furnished.

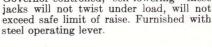
MR-80 MR-160

MR-8 MR-16

GOVERNOR-CONTROLLED

JACKS

Governor-controlled, self-lowering—these





| Jack | Capacity | Height | Raise  | Base Dia. | Head Dia. | Weight |
|------|----------|--------|--------|-----------|-----------|--------|
| No.  | Tons     | Inches | Inches | Inches    | Inches    | Pounds |
| 2825 | 25       | 28     | 15¾    | 12        | 4         | 175    |
| 2835 | 35       | 28     | 15¾    | 12        | 4         | 190    |
| 2650 | 50       | 26     | 13½    | 14        | 5½        | 238    |

## **DUFF-NORTON COMPANY**